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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,370	02/08/2002	Marvin L. Bayne	18199CB	2577
210	7590	09/29/2004	EXAMINER	
MERCK AND CO INC P O BOX 2000 RAHWAY, NJ 070650907			LOCKARD, JON MCCLELLAND	
			ART UNIT	PAPER NUMBER
			1647	
DATE MAILED: 09/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,370

Applicant(s)

BAYNE ET AL.

Examiner

Jon M Lockard

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 22-37 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Status of Application, Amendments, and/or Claims

The preliminary amendment of 02 February 2002 has been received and entered in full. Claims 1-21 have been cancelled, and claims 22-37 are pending.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1647, Examiner Jon M. Lockard.

Quayle Action

This application is in condition for allowance except for the following formal matters:

Information Disclosure Statement

Applicants are advised that if they intend for the references (paper #3 of Application 09/326,879, filed 07 June 1999) to be included on the face of the issuing patent, they must submit an Information Disclosure Statement (IDS) in full compliance with 37 CFR § 1.97.

Drawings

The drawings are objected to because Figures 4-7 disclose nucleotide and amino acid sequences without the accompanying SEQ ID NO. The SEQ ID NO may be inserted into the Figure or the Brief Description of the Drawings. A proposed drawing correction or corrected drawings are required in reply to the Office Action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Sequence Rules

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, the application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reasons set forth below:

Claim 22 recites “comprises the 158 amino acid precursor protein as shown in Figure 6”. Suggested amendment of the claim to read “comprises the 158 amino acid precursor protein as shown in SEQ ID NO:4” would be remedial.

Claim 26 recites “comprises the 135 amino acid mature protein as shown in Figure 6”. Suggested amendment of the claim to read “comprises the 135 amino acid mature protein shown as residues 1-135 of SEQ ID NO:4” would be remedial.

Claim 30 recites “comprises the 138 amino acid precursor protein as shown in Figure 7”. Suggested amendment of the claim to read “comprises the 138 amino acid precursor protein as shown in SEQ ID NO:6” would be remedial.

Claim 34 recites “comprises the 115 amino acid mature protein as shown in Figure 7”. Suggested amendment of the claim to read “comprises the 115 amino acid mature protein shown as residues 1-115 of SEQ ID NO:6” would be remedial.

Advisory information

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

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Claims 22-37 correspond to allowable subject matter (Claims 26-41) from U.S.

Application Serial No. 09/326,879. The application is allowable for reasons set forth in the previous office actions on the merits of Application 09/326,879 on page 5, mailed 08 November 2000, and page 3, mailed 11 April 2001. Furthermore, all claims remain free of the prior art.

The following patents, patent application publications and articles were found by the Examiner during the art search and are here made of note:

- a. Luttun et al. (2002). Revascularization of ischemic tissues by PIGF treatment, and inhibition of tumor angiogenesis, arthritis and atherosclerosis by anti-Flt-1. *Nature Medicine* 8:831-840 (cited herein to demonstrate the state of the art of the therapeutic potential of placental growth factor).
- b. Ferrara et al. (1997). The biology of vascular endothelial growth factor. *Endocrine Reviews* 18(1):4-25 (cited herein to demonstrate the state of the art of the role of VEGF in a variety of physiological and pathological conditions).
- c. GenBank Accession No. BU759674 (10 October 2002) shares 99% sequence identity with bp 1-477 of SEQ ID NO:3 (See attached sequence alignment).
- d. GenBank Accession No. CB797697 (16 May 2003) shares 99.8% sequence identity with bp 3-423 of SEQ ID NO:3 (See attached sequence alignment).

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jon M. Lockard, Ph.D.** whose telephone number is **(571) 272-2717**. The examiner can normally be reached on Monday through Friday, 8:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Brenda Brumback, Ph.D.** can be reached on **(571) 272-0961**.

The fax number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

JML
September 21, 2004

A handwritten signature in black ink, reading "Lorraine Spector". The signature is written in a cursive, flowing style with a large initial "L".

**LORRAINE SPECTOR
PRIMARY EXAMINER**